

**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claims 1, 2, 7-10, 12, 15-25, 27 and 28 are cancelled.

Claim 26 is changed to:

"Claim 26. A method for decoding a signal received from a dispersive channel causing intersymbol interference, said signal encoded using an MLT-3 code, said method comprising the steps of:

generating at least one trellis representing both said MLT-3 code and said dispersive channel; and

performing joint equalization and decoding of said received signal using said trellis,

wherein a state in said trellis is given by a concatenation of said MLT-3 code state and a truncated channel state, wherein said truncated channel state partially describes said dispersive channel, and

wherein a number of states in said trellis is given by  $4 \times (2^K)$ , where K is the truncated channel memory."

Claim 29 is changed to:

"Claim 29. A receiver for processing a signal received from a dispersive channel, said signal encoded using an MLT-3 code, comprising:

a sequence detector that performs joint equalization and decoding of said received signal using at least one trellis representing both said MLT-3 code and said dispersive channel,

wherein a state in said Trellis is given by a concatenation of said MLT-3 code state and a truncated channel state, wherein said truncated channel state partially describes said dispersive channel, and

wherein a number of states in said trellis is given by  $4 \times (2^K)$ , where K is the truncated channel memory."

***Allowable Subject Matter***

Claims 26 and 29 (renumbered 1-2) are allowed.

The following is an examiner's statement of reasons for allowance: claims 26 and 29 (renumbered 1-2) are allowed because a comprehensive search of prior art failed to teach, either alone or in combination, decoding a signal received from a dispersive channel causing intersymbol interference, said signal encoded using an MLT-3 code, comprising generating at least one trellis representing both said MLT-3 code and said dispersive channel; and performing joint equalization and decoding of said received signal using said trellis, wherein a state in said trellis is given by a concatenation of said MLT-3 code state and a truncated channel state, wherein said truncated channel state partially describes said dispersive channel, and wherein a number of states in said

trellis is given by  $4x(2^K)$ , where K is the truncated channel memory, as the applicant has claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUAN A. TORRES whose telephone number is (571)272-3119. The examiner can normally be reached on 8-6 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Juan Alberto Torres  
10/20/2008

/Juan A Torres/  
Examiner, Art Unit 2611